UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,567	10/30/2003	Maurizio Pilu	300200058-2	5917

22879 7590 07/23/2010

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
3404 E. Harmony Road
Mail Stop 35
FORT COLLINS, CO 80528

EXAMINER	
HERNANDEZ, NELSON D	
ART UNIT	PAPER NUMBER
2622	

NOTIFICATION DATE	DELIVERY MODE
07/23/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
ipa.mail@hp.com
laura.m.clark@hp.com

Office Action Summary	Application No.	Applicant(s)	
	10/696,567	PILU ET AL.	
	Examiner	Art Unit	
	Nelson D. Hernández Hernández	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7,11-20,40,42,44,46 and 47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7,11-20,40,42,44,46 and 47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 12, 2010 has been entered.

Response to Amendment

2. The Examiner acknowledges the amended claims filed on July 12, 2010. **Claims 1, 40 and 44** have been amended. **Claims 6, 8-10, 21-39, 41, 43, 45 and 48-60** have been cancelled.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 44 have been considered but are moot in view of the new grounds of rejection.

4. Applicant's arguments filed July 12, 2010 have been fully considered but they are not persuasive. The Applicant argues the following:

a. The Examiner has correctly stated that Metcalfe in view of Takahashi and Matsumoto suggests that "by adjusting the compression of the video being captured, it is possible to record the monitoring image

data having a high degree of importance as much as possible" (final office action, p. 36). More specifically, Metcalfe in view of Takahashi and Matsumoto suggests that the stored data can be "recompressed . . . depending on a degree of importance and increasing the residual capacity" (Matsumoto, col. 7, 11. 31-35). As such, "it is possible to ensure the picture quality of the important monitoring image data while maintaining a picture recording time for a predetermined monitored time, and furthermore, to reliably record the monitoring image data when an alarm is generated" (id., col. 7, 11. 35-40). "Thus, it is possible to record the monitoring image data having a high degree of importance *as much as possible"* (id., col. 7, 11. 40-42) (emphasis added).

Therefore, Metcalfe in view of Takahashi and Matsumoto does not store an image signal in place of a stored image when the value of the saliency signal for the image signal is greater than the value of the saliency signal for the stored image, in contradistinction to claim 40. Rather, Metcalfe in view of Takahashi and Matsumoto compresses image signals having lower saliency signals more than it compresses image signals having higher saliency signals. However, when the memory is full in Metcalfe in view of Takahashi and Matsumoto, a more salient image signal does *not* replace a less salient image signal. Indeed, Metcalfe in view of Takahashi and Matsumoto makes this explicitly clear - while stored data is recompressed depending on its importance to increase residual memory capacity, image data having a high degree of importance is

recorded only *as much as possible.* If there is no residual memory capacity remaining, in other words, existing, less salient image data is not replaced by more salient image data, in contradistinction to claim 40.

Therefore, Metcalfe in view of Takahashi and Matsumoto does not suggest the subject matter of claim 40, such that Metcalfe in view of Takahashi and Matsumoto does not render claim 1 *prima facie* obvious and unpatentable.

- The Examiner disagrees. As shown in col. 4, lines 11-19, Matsumoto et al. teach "*Moreover, when the data storage means has no residual capacity and an image having a high degree of monitoring importance is fetched, image data having a low degree of monitoring importance which are stored in the data storage means are identified through a flag attached every image data, for example, and are deleted or overwritten. Thus, image data having a high degree of monitoring importance are stored in the data storage means.*" that based on the degree of importance images can be replaced with other images. Therefore, Matsumoto et al. teach that the memory stores the image signal in place of a stored image when the value of the saliency signal is greater than a value of a second saliency signal associated with the stored image and the memory is full as claimed.

Claim Objections

5. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. Claim 60 does not appear on the list of claims. It is noted that claim 60 was presented on the response filed on December 17, 2007 and was cancelled on the communication of January 17, 2008.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. **Claims 1-5, 7, 11-20, 44, 46 and 47** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

8. **Regarding claim 1**, it is noted that the limitations "*wherein the at least one operation comprises automatically activating the electronic camera, without user interaction, to produce the image signal, the image signal representing a still digital photograph*" are considered negative limitations in which the operation is an operation that is not made by the user. It is also noted that any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be

explicitly excluded in the claims. See In re Johnson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), *aff 'd mem.*, 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. Ex parte Parks, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993). See MPEP 2173.05(i).

9. **Regarding claims 2-5, 7 and 11-20**, claims 2-5, 7 and 11-20 are rejected under 35 U.S.C. 112, first paragraph as they depend from claim 1 which is rejected under 35 U.S.C. 112, first paragraph.

10. **Regarding claim 44**, claim 44 has the same issues as claim 1.

11. **Regarding claims 46 and 47**, claims 46 and 47 are rejected under 35 U.S.C. 112, first paragraph as they depend from claim 44 which is rejected under 35 U.S.C. 112, first paragraph.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. **Claims 1-5, 7, 11-20, 44, 46 and 47** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. **Regarding claim 1**, claim 1 recites the following:

> *An apparatus comprising:*
>
> *an electronic camera to produce an image signal;*
>
> *a first user operable control to selectively activate the electronic camera to take pictures;*
>
> *a second user operable control to receive an input from a user and to generate, in response to the input from the user, a saliency to indicate user interest in a picture, the saliency signal to have at least one of (a) a value selected from at least three different discrete; or (b) a value selected from a continuous range of values;*
>
> *a circuit to record the value of the saliency signal based on the input received via the second control contemporaneously with activation of the first control; and*
>
> *a memory arranged to store the image signal and the saliency signal,*
>
> *wherein at least one operation of the apparatus is controlled based on the saliency signal, the at least one operation being*

different from recording the value of the saliency signal in the memory, and

wherein the at least one operation comprises automatically activating the electronic camera, without user interaction, to produce the image signal, the image signal representing a still digital photograph.

The Examiner noted that the claim appears to indicate that the operation performed by the camera is performed based on a saliency signal that is inputted by the user and also indicates that the operation is for automatically capturing an image signal representing a still image without user interaction rendering the claim indefinite as it contradicts itself since the capture of the still image is based on the saliency signal that is user operated.

15. **Regarding claims 2-5, 7 and 11-20**, claims 2-5, 7 and 11-20 are rejected under 35 U.S.C. 112, second paragraph as they depend from claim 1 which is rejected under 35 U.S.C. 112, second paragraph.

16. **Regarding claim 44**, claim 44 has the same issues as claim 1 in which the claim appears to indicate that the operation performed by the camera is performed based on a saliency signal that is inputted by the user and also indicates that the operation is for automatically capturing an image signal representing a still image without user interaction rendering the claim indefinite

as it contradicts itself since the capture of the still image is based on the saliency signal that is user operated.

17. **Regarding claims 46 and 47**, claims 46 and 47 are rejected under 35 U.S.C. 112, first paragraph as they depend from claim 44 which is rejected under 35 U.S.C. 112, first paragraph.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19. Claims 44, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi, US 2002/0041757 A1 in view of Mann, US Patent 6,614,408 B1.

20. **Regarding claim 44**, **Takahashi** discloses an imaging system comprising an electronic camera (*See figs. 4(a), 4(b), 8, 9(a), 9(b), 10, and 11*) to produce an image signal representative of a viewed scene, a physically or mechanically operable user control (*Takahashi discloses the use of buttons 109 to set auxiliary information (which the Examiner is interpreting as the saliency information) related to the image data being captured; page 6, ¶ 0106. Takahashi further discloses the use of a pressure sensor 109a and sweat sensor 109b to*

determine the auxiliary information related to the image data (page 6, ¶ 0112 – page 7, ¶ 0114) to receive an input from a user and generate a first saliency signal while the image signal is being produced (*Takahashi further discloses that the auxiliary information includes information related to the persons (i.e. son, daughter, friend, father, mother) (see figs. 23(a) and 23 (b); page 8, ¶ 0117 - page 9, ¶ 0124)) to receive an input from a user and to generate, in response to the input from the user a saliency signal (auxiliary information having information such as persons information)*), saliency circuitry to automatically generate an image related second saliency signal in response to the image signal (*Takahashi further teaches that the auxiliary information includes a degree of importance of said persons appearing in the image data, and that said degree of importance can be determined based on the time length of a scene where a particular person set by the user appear; see page 8, ¶ 0119. Takahashi further teaches that the level of importance of a particular scene would have a value between 0 (0 = not important) and 1 (1 = most important) with increments of 0.1 that can be determined based on the excitement of the user by using a pressure sensor of a sweat sensor or by having a measurement of loudness in the scene being captured (See ¶ 0119). Takahashi further discloses that the level of importance which can be set manually could also be set automatically by use of said pressure, sweat or loudness sensors (Also in ¶ 0119)*), and circuitry to combine said first and second saliency signals while the image signal is being produced to provide a composite saliency signal (*Takahashi discloses that the auxiliary information has persons information and degree of importance of said persons*

and that the auxiliary information is stored with the image signal and further discloses that the camera would also display the auxiliary information on a display screen (As shown in figs. 23, the user would set the auxiliary information and the set auxiliary information would be displayed in the display as shown in figs. 25 and 26 (see persons information and the degree of importance displayed on the display); page 8, ¶ 0118 – page 9, ¶ 0124)) (This teaches the combination of the two saliency signals while the image signal is being produced (the persons information and the degree of importance information stored/displayed together in association with the image while the image is being captured upon operation of the user) to create a composite saliency signal as claimed. Therefore, by teaching that the person's information and the degree of importance information is stored/displayed together in association with the image, Takahashi discloses circuitry for combining said first and second saliency signals while the image signal is being produced to provide a composite saliency signal as claimed), wherein the first saliency signal, the second saliency signal, and the composite saliency signal are to indicate an amount of user interest in the viewed scene (Considering that the user sets the first saliency signal and the second saliency signal (*As discussed above, information related to the persons (i.e. son, daughter, friend, father, mother*) *and the level of importance of a particular scene would have a value between 0 (0 = not important) and 1 (1 = most important) with increments of 0.1 that can be determined based on the excitement of the user by using a pressure sensor of a sweat sensor or by having a measurement of loudness in the scene being captured (See ¶ 0119) and as shown in figs. 25*

and 26, the composite saliency signal that is displayed on the screen having the first and second saliency signals combined to illustrate the level of importance of the scene being produced (page 8, ¶ 0118 – page 9, ¶ 0124)), and the composite saliency signal is to be used to control operation of at least a part of the imaging system (*Takahashi discloses that the auxiliary information has persons information and degree of importance of said persons and that the auxiliary information is stored with the image signal and further discloses that the camera would also display the auxiliary information on a display screen (As shown in figs. 23, the user would set the auxiliary information and the set auxiliary information would be displayed in the display as shown in figs. 25 and 26 (see persons information and the degree of importance displayed on the display); page 8, ¶ 0118 – page 9, ¶ 0124)) being arranged to be controlled in response to the composite saliency signal (based on the auxiliary information the display would display the auxiliary information as shown in figs. 25 and 26*).

Takahashi does not explicitly disclose that the at least one operation comprises automatically activating the electronic camera, without user interaction, to produce the image signal, the image signal representing a still digital photograph.

However, **Mann** discloses an imaging device (*Fig. 2a*) that captures video that is being stored in a circular buffer and that measure the user's pupil to determine a particular level of interest on the image being captured so that when the pupil is dilated more than normal for a particular light level, image capture is performed and stored or transmitted (*Col. 12, lines 12-64*). Mann further teaches

that the invention would allow a better photographic composition because the act of taking pictures or shooting video no longer requires conscious thought or effort (*Col. 21, lines 20-46*).

Therefore, taking the combined teaching of Takahashi in view of Mann as a whole, it would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply the concept of having a camera that capture images based on a level of importance determined measured from the user's pupil dilatation without the user physically controlling the capture of images as taught by Mann to modify the teaching of Takahashi et al. to automatically activating the electronic camera, without user interaction, to produce the image signal, the image signal representing a still digital photograph. The motivation to do so would have been to allow a better photographic composition because the act of taking pictures or shooting video no longer requires conscious thought or effort as suggested by Mann (*Col. 21, lines 20-46*).

21. **Regarding claim 46**, Takahashi discloses a user operable picture taking control to enable the electronic camera to take pictures (*shooting button 104 as shown in fig. 4 (b)*).

22. **Regarding claim 47**, Takahashi discloses that the first saliency signal is to include more than two values (*As shown in figs. 23 (a) and 23 (b), Takahashi discloses that more than one person can be selected (i.e. the son and the daughter); page 8, ¶ 0119*).

23. Claims 1, 3-5 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metcalfe, AU 743216 B in view of Takahashi, US 2002/0041757 A1 and further in view of Mann, US Patent 6,614,408 B1.

24. **Regarding claim 1**, **Metcalfe** discloses a camera apparatus (*See fig. 1*) comprising an electronic camera (*See fig. 1*) to produce an image signal, a first user operable control (*111 as shown in fig. 1*) to selectively activate the electronic camera to take pictures, and a second user operable control (*112 as shown in fig. 1, note that the limitations "an additional physically or mechanically operable user control" are written as optional elements by using the word "or"*) to receive an input from a user and to generate, in response to the input from the user a saliency signal to indicate user interest in a picture (*Metcalfe discloses generating a level of interest (LOI) set by the user when using button 112*), the saliency signal to have at least one of (a) a value selected from at least three different discrete values (*Metcalfe discloses assigning a level of interest to the image data being recorded, wherein the user can variably assign a plurality of level of interest through the capture of the video sequence; see Fig. 3. This teaches generating a saliency signal that is selected from at least three different discrete values while the image signal is being produced*), or (b) a value selected fro a continuous range of values (*Metcalfe discloses assigning a level of interest to the image data being recorded, wherein the user can variably assign a plurality of level of interest through the capture of the a video sequence; see Fig. 3. This teaches generating a saliency signal that have a value selected fro a continuous range of values*), a circuit to record the value of the saliency signal based on the

input received via the second control contemporaneously with activation of the first control (*Metcalfe discloses that the LOI is stored as the frames are captured by the video camera 101 (Page 5, lines 8-35) and also that after operation of the record button 111, the LOI signals can be input by the user and recorded by the video camera (Page 4, lines 5-32). This inherently teaches a circuitry to record the value of the saliency signal based on the input received via the second control contemporaneously with activation of the first control as claimed since a circuitry is necessary to perform the recording operation of the LOI to the tape and also considering that the operation to record LOI signals can be performed right after the record button to capture image frames is operated as taught in Metcalfe. It is also noted that the word "contemporaneous" is defined as "Originating, existing, or happening during the same period of time" (Definition from "The American Heritage® Dictionary of the English Language", Fourth Edition, 2000)*), and a memory arranged to store the image signal and the saliency signal (*video cassette120 as shown in fig. 1; page 4, lines 5-13; page 5, lines 4-35*), wherein at least one operation of the apparatus is controlled based on the saliency signal (*Metcalfe discloses setting the LOI while the camera is activated to take pictures, and storing said LOI associated with the images so that said LOI can be used to control the reproduction of the images (i.e. printing, creating thumbnail files for photo albums, etc.)) being arranged to be controlled in response to the saliency signal (as discussed in page 6, line 31 – page 7, line 8 , Metcalfe discloses that the saliency signal (LOI) can be used to control the reproduction of the images (i.e. printing, creating thumbnail files for photo*

albums, etc.)) (See page 4, line 5 – page 5, line 23; page 6, line 23 – page 7, line 8).

Metcalfe does not explicitly disclose that the at least one operation is different from recording the value of the saliency signal in the memory and that that the at least one operation comprises automatically activating the electronic camera, without user interaction, to produce the image signal, the image signal representing a still digital photograph.

However, **Takahashi** discloses an electronic camera (*See figs. 4(a), 4(b), 8, 9(a), 9(b), 10, and 11*) producing image signal, comprising a first user operable control (*shooting button 104 as shown in fig. 4 (b)*) to selectively activate the electronic camera to take pictures, and a second user operable control (*Takahashi discloses the use of buttons 109 to set auxiliary information (which the Examiner is interpreting as the saliency information) related to the image data being captured; page 6, ¶ 0106. Takahashi further discloses the use of a pressure sensor 109a and sweat sensor 109b to determine the auxiliary information related to the image data (page 6, ¶ 0112 – page 7, ¶ 0114). Also Takahashi discloses that the auxiliary information includes information related to the persons (i.e. son, daughter, friend, father, mother) and a degree of importance of said persons appearing in the image data (see figs. 23(a) and 23 (b); page 8, ¶ 0117 - page 9, ¶ 0124)*) to receive an input from a user and to generate, in response to the input from the user a saliency signal to indicate user interest in a picture (*auxiliary information having information such as persons information and degree of importance of the persons in the image*), the saliency

signal to have at least one of (a) a value selected from at least three different discrete values (*as shown in figs. 23(a) and 23(b), the persons information and degree of importance of the persons in the image can change in value between a plurality of values (i.e. three or more values as claimed)*), or (b) a value selected from a continuous range of values (*the auxiliary information can be changed during the capture of the image signal to a plurality of continuous values as shown in figs. 23(a) and 23(b)*), and a memory (*Fig. 1: 13*) arranged to store the image signal and the saliency signal (*Takahashi further teaches storing the auxiliary information in the header of the scene; page 8, ¶ 0123 – page 9, ¶ 0126*), wherein at least one operation of the apparatus is controlled based on the saliency signal (*Takahashi discloses recording the auxiliary information and further discloses that the camera would also display the auxiliary information on a display screen (As shown in figs. 23, the user would set the auxiliary information and the set auxiliary information would be displayed in the display as shown in figs. 25 and 26; page 8, ¶ 0118 – page 9, ¶ 0124). It is noted that by teaching that based on the auxiliary information the display would display the auxiliary information Takahashi discloses that at least one operation of the apparatus is controlled based on the saliency signa*l), the at least one operation being different from to recording the saliency signal in the memory (*The Examiner is interpreting displaying the auxiliary information using the display of the camera as the operation that is different from recording the saliency signal in the memory as claimed*). Displaying the auxiliary information while capturing the image data is advantageous because it would provide the user with a user friendly interface

that would allow changing the degree of importance of the images being captured and would also allow the user to be aware of the information being added to the image data.

Therefore, taking the combined teaching of Metcalfe in view of Takahashi as a whole, it would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply the concept of having the camera further displaying the salient signal being assign to the image data as taught in Takahashi to modify the teaching of Metcalfe to perform an operation in response to the saliency signal, the operation being different from recording the saliency signal in the memory. The motivation to do so would have been to provide the user with a user friendly interface that would allow changing the degree of importance of the images being captured and would also allow the user to be aware of the information being added to the image data.

The combined teaching of Metcalfe in view of Takahashi fails to teach that the at least one operation comprises automatically activating the electronic camera, without user interaction, to produce the image signal, the image signal representing a still digital photograph.

However, **Mann** discloses an imaging device (*Fig. 2a*) that captures video that is being stored in a circular buffer and that measure the user's pupil to determine a particular level of interest on the image being captured so that when the pupil is dilated more than normal for a particular light level, image capture is performed and stored or transmitted (*Col. 12, lines 12-64*). Mann further teaches that the invention would allow a better photographic composition because the act

of taking pictures or shooting video no longer requires conscious thought or effort (*Col. 21, lines 20-46*).

Therefore, taking the combined teaching of Metcalfe in view of Takahashi and further in view of Mann as a whole, it would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply the concept of having a camera that capture images based on a level of importance determined measured from the user's pupil dilatation without the user physically controlling the capture of images as taught by Mann to modify the teaching of Metcalfe and Takahashi et al. to automatically activating the electronic camera, without user interaction, to produce the image signal, the image signal representing a still digital photograph. The motivation to do so would have been to allow a better photographic composition because the act of taking pictures or shooting video no longer requires conscious thought or effort as suggested by Mann (*Col. 21, lines 20-46*).

25. **Regarding claim 3**, the combined teaching of Metcalfe in view of Takahashi and further in view of Mann as discussed and analyzed in claim 1 further teaches a buffer to receive the image signal, the buffer having a capacity controlled by the value of the saliency signal (*In a further embodiment, Takahashi discloses the concept of determining the amount of data to be transmitted based on the cost of transmission service; wherein the allowed length of data (L) is determined and compared to the amount of data to be transmitted, if the amount of data to be transmitted the apparatus would select video section with a priority*

higher than a threshold value. If after selecting those video with the priority higher than a threshold, the length of data still more than the allowed length, the apparatus would increase the priority threshold, however, if the length is less that the allowed length, the video signals are transmitted (Page 12, ¶ 0151-0154). By teaching adjusting the amount of data to be transmitted based on the length allowed for transmission and also based on the priority of the video signals to be transmitted, Takahashi inherently discloses "a buffer to receive the image signal, the buffer having a capacity controlled by the value of the saliency signal" as claimed since the amount being adjusted in the apparatus needs to be in a particular buffer or memory prior to transmission in order to properly select the video signals with higher priority). One of an ordinary skill in the art would have found obvious to apply the concepts of adjusting the amount of data to be transmitted based on the priority set to the video signals to further modify the camera apparatus to have a buffer for receiving said image signal, the buffer having a capacity arranged to be controlled by the value of the saliency signal during operation of the camera apparatus with the motivation of select as many as possible the most important video signals from the video data for transmission as suggested by Takahashi (*Page 12, ¶ 0154).*

26. **Regarding claim 4**, the combined teaching of Metcalfe in view of Takahashi and further in view of Mann as discussed and analyzed in claim 1 further teaches image selection circuitry to receive the saliency and image signals and to selectively pass the image signal based on the saliency signal (*As*

taught in Metcalfe, the camera receives the saliency signal (LOI) and based on said saliency signal, when reproducing, the camera would select particular images based on the degree of importance as set by the user when recording the images. By teaching that the images with a high LOI would be selected for creating an album or to be printed with high quality further teaches that images that do not have a high LOI would be passed or skipped since only the images with a high LOI would be displayed in the virtual album. Metcalfe as applied reads on "…image selection circuitry to receive the saliency and image signals and to selectively pass the image signal based on the saliency signal" as claimed since the display or skip of images is determined based on the LOI set. (See pages 5-7, specifically page 6, line 31 – page 7, line 8)).

27. **Regarding claim 5**, the combined teaching of Metcalfe in view of Takahashi and further in view of Mann as discussed and analyzed in claim 1 further teaches management circuitry to selectively retain in the memory (*memory 13 in Takahashi, fig. 1*) images associated with higher saliency levels in preference to images with lower saliency levels (*As discussed with respect to claim 1, Takahashi further discloses that the images are recorded or transmitted based on the importance level of the image, wherein only images with high importance level can be recorded in order to reduce the amount of use of the recording medium; page 5, ¶ 0094*). It would have been obvious to one of an ordinary skill in the art at the time the invention was made to modify the teaching of Metcalfe with the concepts and teaching of Takahashi to further include

management circuitry to selectively retain in the memory, images associated with higher saliency levels in preference to images with lower saliency levels. The motivation to do so would have been to reduce the amount of use of the recording medium as suggested by Takahashi (*Page 5, ¶ 0094*).

28. **Regarding claim 11**, Metcalfe discloses that the first user control includes a normal picture taking control on the electronic camera (*111 as shown in fig. 1*).

29. **Regarding claim 12**, the combined teaching of Metcalfe in view of Takahashi and further in view of Mann as discussed and analyzed in claim 1 further teaches that the saliency signal is a first saliency signal and further comprising a third user operable control to generate a second saliency signal (*As shown in Takahashi, figs. 4(b): 109; fig. 9(a): 109, 10: 109a, and 11: 109b, Takahashi discloses the use of a plurality of buttons to select from different auxiliary information to be assigned to the video signal (note that the buttons 109 are physically located on the camera). Furthermore, as shown in figs 23(a) and 23(b), Takahashi further discloses that the auxiliary information can be selected using a monitor, wherein the user can select the person information and the degree of importance of the persons using buttons 103m, 103n, 101m and 101n; page 8, ¶ 0119 (although these buttons are displayed on the touch screen display, the Examiner understands that the buttons are considered different user controls since they have different physical location on said display)*). Grounds for rejecting claim 1 apply here.

30. **Regarding claim 13**, the combined teaching of Metcalfe in view of Takahashi and further in view of Mann as discussed and analyzed in claims 1 and 12 further teaches saliency circuitry to combine the first and second signals to form a complex saliency signal (*the Examiner is reading the complex saliency signal as the combined information having the persons information and the degree of importance information as shown in Takahashi*), the complex saliency signal being the saliency signal to control at least one operation (*The Examiner is reading the operation as the display operation in the camera in Takahashi as discussed in claim 1*) and the saliency signal stored by the memory (*As discussed in claim 1, Takahashi discloses that the auxiliary information has persons information and degree of importance of said persons and that the auxiliary information is stored with the image signal and further discloses that the camera would also display the auxiliary information on a display screen (As shown in figs. 23, the user would set the auxiliary information and the set auxiliary information would be displayed in the display as shown in figs. 25 and 26 (see persons information and the degree of importance displayed on the display); page 8, ¶ 0118 – page 9, ¶ 0124)) being arranged to be controlled in response to the saliency signal (based on the auxiliary information the display would display the auxiliary information as shown in figs. 25 and 26. Furthermore, the plurality of saliency signals are both stored in the memory and the display operation of the camera is performed based on the first and second saliency signals as they are input and stored in memory*). Grounds for rejecting claim 1 and 12 apply here.

31. **Regarding claim 14**, the combined teaching of Metcalfe in view of Takahashi and further in view of Mann as discussed and analyzed in claim 1 further teaches that the saliency signal is a first saliency signal (*As discussed in claim 1, the saliency signal in Metcalfe for controlling the level of interest of a captured scene is considered a first saliency signal as claimed. Furthermore, Takahashi further teaches the sue of a plurality of saliency signals to be used to control the operation of the camera as discussed in claim 1*) and further comprising a saliency circuitry to generate an image related saliency signal in response to said image signal (*Metcalfe discloses controlling the reproduction operation of the camera based on the associated saliency signal to the image signal so that when reproducing the image signal with higher importance would be displayed differently from the other image signal. See page 4, line 5 – page 5, line 23; page 6, line 23 – page 7, line 8. Takahashi further discloses reproducing the video based on the importance level of the image, wherein only images with high importance level can be reproduced so that the user can enjoy the recorded work without feeling tired, and the power consumption is reduced to secure more driving time; page 10, ¶ 0131*).

32. **Regarding claim 15**, limitations have been discussed and analyzed in claim 13.

33. **Regarding claim 16**, **Metcalfe** discloses circuitry to incorporate the saliency signal in the image signal (*Metcalfe discloses incorporating said saliency*

signal (LOI) to each of the frames in the image signal. See page 4, line 5 – page 5, line 23; page 6, line 23 – page 7, line 8).

34. **Regarding claim 17**, the combined teaching of Metcalfe in view of Takahashi and further in view of Mann as discussed and analyzed in claims 1 teaches that the second user control is part of the camera or is physically attached to the camera body (*See Metcalfe, controls in Fig. 1; see also Takahashi buttons 109 as shown in figs. 4(b), 9(b), 10 and 11, and buttons 103m, 103n, 101m, 101n as shown in figs. 23(a) and 23(b)*).

35. **Regarding claim 18**, the combined teaching of Metcalfe in view of Takahashi and further in view of Mann fails to teach that the second user control is a remote control for communication with the camera. However, the Examiner takes Official Notice that the concept of controlling a camera with a remote control is well known in the art at the time the invention was made and that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the user control of Metcalfe and Takahashi a remote control as opposed to a camera-body integrated control. One would have been motivated to do so because it is well known in the art that by using a remote control to control some elements of a camera, the user does not have to be near the camera to send and receive desired signals from the camera. This is particularly advantageous in cases where plural cameras are used or cameras are placed out of the reach of the user (e.g. surveillance cameras), where the

remote control would allow the user to send signals to the camera(s) from a separate location, thereby simplifying camera control for the user. It is noted that in the previous Office Action, claim 18 was rejected taking Official Notice to the recited limitations. Because the Applicant failed to traverse the Examiner's assertion of Official Notice, the well known in the art statement is taken to be admitted prior art. See MPEP § 2144.03 [R-1] (C).

36. **Regarding claim 19**, **Metcalfe** discloses that the second user control comprises a physically movable control member (*pressure button that assign a level of interest of an image signal based on the pressure applied to said button) and a sensor arranged to be responsive to movement of the control member (See page 4, line 27 – page 5, line 4). By teaching a pressure button that assigns a LOI of an image signal based on the pressure applied to the button, Metcalfe discloses a physically movable control member (in this case the pressure button as discussed in Metcalfe) and a sensor arranged to be responsive to movement of the control member since by teaching that the LOI is assigned based on the pressure applied to the button, the use of a sensor to determine the applied pressure in order to assigned the LOI of an image is inherent and necessitated in Metcalfe*).

37. **Regarding claim 20**, the Examiner notes that the limitations "*the second user control comprises a pressure **or** force sensing transducer for deriving the*

saliency signal that can have values that are continuously variable", the elements "pressure" **or** "force sensing transducer" are written as optional elements by using the word "**or**".

Metcalfe discloses that the second user control comprises a pressure or force sensing transducer for deriving the saliency signal that can have values that are continuously variable (*Metcalfe as applied to claim 19, teaches the use of pressure (pressure button that assign a level of interest of an image signal based on the pressure applied to said button; page 4, line 27 – page 5, line 4*) to determine the value of the saliency signal. By teaching that Metcalfe discloses the use of pressure applied to the button, Metcalfe discloses the use of pressure to derive the value of the saliency signal as claimed.

38. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metcalfe, AU 743216 B and Takahashi, US 2002/0041757 A1 in view of Mann, US Patent 6,614,408 B1 and further in view of Matsumoto et al., US Patent 6,795,642 B2.

39. **Regarding claim 2**, although Takahashi teaches a compression circuitry (*See Takahashi, fig. 1: 15; page 5, ¶ 0097; page 6, ¶ 0105*) to compress the image signals and that although the invention is described on the premise that a shot picture is recorded, a shot picture is not necessarily recorded, and it can be used also when compressed video and audio data are transmitted as they are to be used on a network or the like (*page 10, ¶ 0130*), the combined teaching of

Metcalfe in view of Takahashi and further in view of Mann fails to teach compressing the image signals to an extent determined by the saliency signal.

However, **Matsumoto et al.** teaches the concept of having a video recording apparatus (*Fig. 2*) of a surveillance system, recording video data captured by an electronic camera (*See fig. 1*), wherein when an alarm is activated, the importance of the video is determined to be high as compared to when the alarm is not activated (*Col. 3, lines 46-67*). Matsumoto et al. further discloses that based on the degree of importance given to the video signal, the data compression is also adjusted (*i.e. if the importance degree of the video is low, it would be compressed at high level and if the importance degree of the video is high, said video would be compressed at low level*) (*Col. 3, line 15 – col. 4, lines 19*). Matsumoto also discloses that the importance level can also be adjusted by the user operating the surveillance system (*Col. 7, lines 22-34*). Matsumoto et al. further discloses that by adjusting the compression of the video being captured, it is possible to record the monitoring image data having a high degree of importance as much as possible (*Col. 7, lines 35-43*).

Therefore, taking the combined teaching of Metcalfe and Takahashi in view of Mann and further in view of Matsumoto et al. as a whole, it would have been obvious to one of ordinary skill in the art a the time the invention was made to apply the concept of adjusting the compression of a video captured by an electronic camera based on a degree of importance assign to the video as discussed in Matsumoto et al. to modify the teaching of Metcalfe, Takahashi and Mann by compressing the image signals to an extent determined by the saliency

signal. The motivation to do so would have been to record the monitoring image data having a high degree of importance as much as possible as suggested in Matsumoto et al. (*Col. 7, lines 35-43*).

40. **Regarding claim 7**, the combined teaching of Metcalfe and Takahashi in view of Mann and further in view of Matsumoto et al. further teaches a management circuitry to selectively retaining in the memory images associated with higher saliency levels in preference to images with lower saliency levels (*Takahashi further discloses that the images are recorded or transmitted based on the importance level of the image, wherein only images with high importance level can be recorded in order to reduce the amount of use of the recording medium; page 5, ¶ 0094*).

41. Claims 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metcalfe, AU 743216 B in view of Takahashi, US 2002/0041757 A1 and further in view of Matsumoto et al., US Patent 6,795,642 B2.

42. **Regarding claim 40**, **Metcalfe** discloses an imaging system (*See fig. 1*) comprising an electronic camera (*See fig. 1*) to produce an image signal, physically or mechanically operable user controls (*See user controls 106, 104, 111, 112, 110 and 108 as shown in fig. 1*), the user controls being arranged to receive an input from a user and to generate first saliency signal (*Metcalfe discloses the use of button 112 to generate a plurality of saliency signals (Level*

of interest signals "LOI") to be associated to the image signal being recorded with the camera) while the image signal is being produced, and saliency circuitry (*the camera in Metcalfe inherently has a saliency signal circuitry to generate the saliency signal upon operation of the camera button 112*) for storing said first saliency signal (*Metcalfe discloses recording the plurality of saliency signals in a memory (tape 120 in fig. 1) in association with the image data; see page 4, line 5 – page 5, line 23; page 6, line 23 – page 7, line 8*), the saliency signal having at least one of (a) a value selected from at least three different discrete values (*Metcalfe discloses assigning a level of interest to the image data being recorded, wherein the user can variably assign a plurality of level of interest through the capture of the a video sequence; see Fig. 3. This teaches generating a saliency signal having a value from at least three different discrete values*), or (b) a value selected from a continuous range of values (*Metcalfe discloses assigning a level of interest to the image data being recorded, wherein the user can variably assign a plurality of level of interest through the capture of the a video sequence; see Fig. 3. This teaches generating a saliency signal having a value selected from a continuous range of values*), a memory (*120 as shown in fig. 1*) to store the image signal and the saliency signal in response to the saliency signal (*page 4, lines 5-13; page 5, lines 4-35*), and operation of at least part of the electronic camera being arranged to be controlled in response to the saliency signal (*as discussed in page 6, line 31 – page 7, line 8, Metcalfe discloses that the saliency signal (LOI signal stored in memory 120) can be used to control the reproduction of the images (i.e. printing, creating thumbnail files for*

photo albums, etc.)) (See page 4, line 5 – page 5, line 23; page 6, line 23 – page 7, line 8).

Metcalfe does not explicitly disclose at least two physically or mechanically operable user controls, each of the user controls for generating first and second saliency signals; that said saliency circuitry combines said first and second saliency signals to form a complex saliency signal; and that said memory stores the image signal in place of a stored image when the value of the saliency signal is greater than a value of a second saliency signal associated with the stored image and the memory is full.

However, **Takahashi** teaches an imaging system comprising an electronic camera (*See figs. 4(a), 4(b), 8, 9(a), 9(b), 10, and 11*) to produce an image signal representative of a viewed scene, a physically or mechanically operable user control (*Takahashi discloses the use of buttons 109 to set auxiliary information (which the Examiner is interpreting as the saliency information) related to the image data being captured; page 6, ¶ 0106. Takahashi further discloses the use of a pressure sensor 109a and sweat sensor 109b to determine the auxiliary information related to the image data (page 6, ¶ 0112 – page 7, ¶ 0114*) to receive an input from a user and generate a first saliency signal while the image signal is being produced (*Takahashi further discloses that the auxiliary information includes information related to the persons (i.e. son, daughter, friend, father, mother) (see figs. 23(a) and 23 (b); page 8, ¶ 0117 - page 9, ¶ 0124)) to receive an input from a user and to generate, in response to the input from the user a saliency signal (auxiliary information having information such as persons*

information)), saliency circuitry to automatically generate an image related second saliency signal in response to the image signal (*Takahashi further teaches that the auxiliary information includes a degree of importance of said persons appearing in the image data, and that said degree of importance can be determined based on the time length of a scene where a particular person set by the user appear; see page 8, ¶ 0119. Takahashi further teaches that the level of importance of a particular scene would have a value between 0 (0 = not important) and 1 (1 = most important) with increments of 0.1 that can be determined based on the excitement of the user by using a pressure sensor of a sweat sensor or by having a measurement of loudness in the scene being captured (See ¶ 0119). Takahashi further discloses that the level of importance which can be set manually could also be set automatically by use of said pressure, sweat or loudness sensors (Also in ¶ 0119)*), and circuitry to combine said first and second saliency signals while the image signal is being produced to provide a composite saliency signal (*Takahashi discloses that the auxiliary information has persons information and degree of importance of said persons and that the auxiliary information is stored with the image signal and further discloses that the camera would also display the auxiliary information on a display screen (As shown in figs. 23, the user would set the auxiliary information and the set auxiliary information would be displayed in the display as shown in figs. 25 and 26 (see persons information and the degree of importance displayed on the display); page 8, ¶ 0118 – page 9, ¶ 0124)) (This teaches the combination of the two saliency signals while the image signal is being produced (the persons*

information and the degree of importance information stored/displayed together in association with the image while the image is being captured upon operation of the user) to create a composite saliency signal as claimed. Therefore, by teaching that the person's information and the degree of importance information is stored/displayed together in association with the image, Takahashi discloses circuitry for combining said first and second saliency signals while the image signal is being produced to provide a composite saliency signal as claimed), wherein the first saliency signal, the second saliency signal, and the composite saliency signal are to indicate an amount of user interest in the viewed scene (Considering that the user sets the first saliency signal and the second saliency signal (*As discussed above, information related to the persons (i.e. son, daughter, friend, father, mother*) *and the level of importance of a particular scene would have a value between 0 (0 = not important) and 1 (1 = most important) with increments of 0.1 that can be determined based on the excitement of the user by using a pressure sensor of a sweat sensor or by having a measurement of loudness in the scene being captured (See ¶ 0119) and as shown in figs. 25 and 26, the composite saliency signal that is displayed on the screen having the first and second saliency signals combined to illustrate the level of importance of the scene being produced (page 8, ¶ 0118 – page 9, ¶ 0124)*), and the composite saliency signal is to be used to control operation of at least a part of the imaging system (*Takahashi discloses that the auxiliary information has persons information and degree of importance of said persons and that the auxiliary information is stored with the image signal and further discloses that the camera*

would also display the auxiliary information on a display screen (As shown in figs. 23, the user would set the auxiliary information and the set auxiliary information would be displayed in the display as shown in figs. 25 and 26 (see persons information and the degree of importance displayed on the display); page 8, ¶ 0118 – page 9, ¶ 0124)) being arranged to be controlled in response to the composite saliency signal (based on the auxiliary information the display would display the auxiliary information as shown in figs. 25 and 26).

Therefore, taking the combined teaching of Metcalfe in view of Takahashi as a whole, it would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply the concept of having the camera with a plurality of operation controls to generate different saliency signals to be combined to control the operation of the display to further displaying the combined saliency signal being assign to the image data as taught in Takahashi to modify the teaching of Metcalfe to have at least two physically or mechanically operable user controls, each of the user controls for generating first and second saliency signals; that said saliency circuitry combines said first and second saliency signals to form a composite saliency signal; that the operation of at least part of the electronic camera being arranged to be controlled in response to the complex saliency signal. The motivation to do so would have been to provide the user with a user friendly interface that would allow changing the degree of importance of the images being captured and would also allow the user to be aware of the information being added to the image data.

The combined teaching of Metcalfe in view of Takahashi fails to teach that the memory stores the image signal in place of a stored image when the value of the saliency signal is greater than a value of a second saliency signal associated with the stored image and the memory is full.

However, **Matsumoto et al.** teaches the concept of having a video recording apparatus (*Fig. 2*) of a surveillance system, recording video data captured by an electronic camera (*See fig. 1*), wherein when an alarm is activated, the importance of the video is determined to be high as compared to when the alarm is not activated (*Col. 3, lines 46-67*). Matsumoto et al. further discloses that based on the degree of importance given to the video signal, the data compression is also adjusted (*i.e. if the importance degree of the video is low, it would be compressed at high level and if the importance degree of the video is high, said video would be compressed at low level*) (*Col. 3, line 15 – col. 4, lines 19*). Matsumoto also discloses that the importance level can also be adjusted by the user operating the surveillance system (*Col. 7, lines 22-34*). Matsumoto et al. further discloses that by adjusting the compression of the video being captured, it is possible to record the monitoring image data having a high degree of importance as much as possible (*Col. 7, lines 35-43*). In col. 4, lines 4, lines 1-19, Matsumoto et al. further teaches that based on the degree of importance of the image data being recorded, when the memory has no residual capacity images that have lower level of importance would be identified and deleted or overwritten so that images with high degree of importance would be stored in the storage means (This teaches that the memory stores the image

signal in place of a stored image when the value of the saliency signal is greater than a value of a second saliency signal associated with the stored image and the memory is full as claimed).

Therefore, taking the combined teaching of Metcalfe in view of Takahashi and further in view of Matsumoto et al. as a whole, it would have been obvious to one of ordinary skill in the art a the time the invention was made to apply the concept of replacing images with lower level of importance with images captured with higher levels of importance when the memory has no residual capacity, images that have lower level of importance would be identified and deleted or overwritten as discussed in Matsumoto et al. to modify the teaching of Metcalfe and Takahashi by having the memory storing the image signal in place of a stored image when the value of the saliency signal is greater than a value of a second saliency signal associated with the stored image and the memory is full. The motivation to do so would have been to record the monitoring image data having a high degree of importance as much as possible as suggested in Matsumoto et al. (*Col. 7, lines 35-43*).

43. **Regarding claim 42**, the combined teaching of Metcalfe in view of Takahashi and further in view of Matsumoto et al. as discussed and analyzed in claim 40 further teaches a separate user operable picture taking control for selectively activating the electronic camera to take pictures (*As shown in Takahashi, figs. 4(b): 109; fig. 9(a): 109, 10: 109a, and 11: 109b, Takahashi discloses the use of a plurality of buttons to select from different auxiliary*

information to be assigned to the video signal (note that the buttons 109 are physically located on the camera). Furthermore, as shown in figs 23(a) and 23(b), Takahashi further discloses that the auxiliary information can be selected using a monitor, wherein the user can select the person information and the degree of importance of the persons using buttons 103m, 103n, 101m and 101n; page 8, ¶ 0119 (although these buttons are displayed on the touch screen display, the Examiner understands that the buttons are considered different user controls since they have different physical location on said display)).

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernández Hernández whose telephone number is (571) 272-7311. The examiner can normally be reached on 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nelson D. Hernández Hernández/
Examiner, Art Unit 2622
July 18, 2010